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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,175	07/27/2001	Sanjay Kuttappa	DSCK-1220	9642

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Lorusso & Loud
440 Commercial Street
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EXAMINER

SUHOL, DMITRY

ART UNIT	PAPER NUMBER
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3712

DATE MAILED: 04/22/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,175

Applicant(s)

KUTTAPPA ET AL.

Examiner

Dmitry Suhol

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 19-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 19-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 and 19-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,270,428. Although the conflicting claims are not identical, they are not patentably distinct from each other because they set forth subject matters which are obvious over each other and only differ in breadth of terminology used, for example a thermoset material in claim 2 in the application is an obvious variation of the material called polybutadiene rubber in claim 1 in U.S. Patent No. 6,270,428.

Claim Objections

Claim 32 is objected to because of the following informalities: Lacking a period at the end of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, the structural features encompassed by the phrase "center can range from 1.00-1.48 inches" can't be determined. It is unclear what attribute has the above dimensions (i.e. diameter, radius, circumference or some other dimension).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutz et al '104. Lutz discloses a thread wound golf ball containing most of the elements of the claims, including with reference to claim 1, a center (figure 2, element 10), a thread winding layer (figure 2, element 20) comprising at least one thread, a cover disposed over a core (figure 2, element 25). Lutz further discloses a thread comprised of a thermoset material as required by claim 2 (col. 4, lines 37-39 and col. 5,

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lines 29-34), a thread comprised of a thermoplastic elastomer material as required by claim 3 (col. 4, lines 37-39 and col. 5, lines 29-34), a thread comprising (adding as required by claim 20) at least one high specific gravity filler having a specific gravity greater than 5.6 as required by claims 4-6 (col. 8, lines 46-49 and line 61-62), a specific high gravity filler being tungsten as required by claims 7-12 and 21-22 (col. 9, line 6). The step of wrapping at least one thread around a center, as required by claim 19, is described in col. 5, lines 29-32, while disposing a cover upon a core (as required by claim 19) is also described in col. 5, lines 40-43.

Although Lutz discloses most of the elements of the claims, as stated above, the reference fails to explicitly teach a thread layer having a specific gravity of greater than 1.2 as required by claims 1-3, 19. However, Lutz clearly teaches the addition of a high specific gravity filler to a thread layer for the purpose of controlling the moment or inertia (col. 8, lines 49-51), much like the applicant, therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention to have a thread layer with a specific gravity of greater than 1.2, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). Additionally, a thread layer having a specific gravity of greater than 1.2 appears to be a design choice in that applicant does not disclose any critical need for such a value (see applicant's specification page 3, lines 16-19), It is further pointed out that Table – 2 does not appear to support applicants need for a thread layer having a specific gravity of 1.2 as

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the table (while grossly lacking data points) shows thread layers having a specific gravity of 0.725 and 0.777.

Claims 23-25, 27-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutz et al '104 in view of Kakiuchi et al '142. Lutz discloses most of the elements of the claims, as stated above, however Lutz fails to explicitly teach a thread winding layer having a specific gravity greater than 0.94 as required by claim 23, a ball having a calculated Moment of Inertia from 12.4 to 13.4 (g-in²) as required by claim 25, a center of a ball ranging from 1.00 to 1.48 inches as required by claim 27, a center weighing from 15 to 35 grams as required by claim 28 and a specific gravity of a center of a golf ball being 1.2 to 1.3 as required by claim 33. However, Kakiuchi discloses a wound golf ball teaching a thread winding layer having a specific gravity greater than 0.94 (col. 2, lines 54-56), a ball center within a range of 1.00 to 1.48 inches (figure 2, element 1), a center weighing within a range of 15 to 35 grams (figure 2, element 1) with a specific gravity within a range of 1.2 to 1.3 (figure 2, element 1). Therefore it would have been obvious to one having ordinary skill in the art to manufacture the golf ball of Lutz with the above characteristics for the purpose of providing a durable golf ball with a longer flight/carry, initial velocity and roll distance that is within the limitations of the allowable tolerances (per regulation play). Additionally, since Lutz is clearly concerned with the Moment of Inertia of his golf ball (col. 8, lines 49-51) it would have been obvious to provide a golf ball with a calculated Moment of Inertia from 12.4 to 13.4 (g-in²) for the purpose of providing a with a good spin rate and spin decay, especially since

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golf balls with a moment of inertia in the above range are known in the art (i.e. applicants Table – 2, Ball #1) and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lutz et al '104 and Kakiuchi et al '142, as stated above, and further in view of Umezawa et al '885. Although Lutz, as modified by Kakiuchi, discloses most of the elements of the claims, as stated above, the reference fails to explicitly teach a thread layer having a thickness in the range of 0.05 to 0.35 inches. However, Umezawa discloses a golf ball which teaches that it is known to produce a golf ball with a thread layer falling in the range of 0.05 to 0.35 inches (see abstract). Therefore it would have been obvious to produce a golf ball with a thread layer thickness being in the range of 0.05 to 0.35 inches for the purpose of a variety of spin and velocity characteristics of a golf ball, especially since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 29-32 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutz et al '104 in view of Kakiuchi et al '142 and applicants own admission. Lutz, as modified by Kakiuchi, discloses most of the elements of the claims, as stated above, however Lutz fails to explicitly teach a thread layer having a thickness

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from 0.05 to 0.35 inches as required by claim 26, a core size ranging from 1.48 to 1.68 inches as required by claim 29, a core weighing from 30 to 40 grams as required by claim 30, a diameter of a golf ball being from 1.58 to 1.78 inches as required by claim 31, a ball weighing 40 to 50 grams as required by claim 32, and a thread layer weighing from 2.5 to 25.0 grams as required by claim 34. However, applicants Table – 2 clearly teaches that golf balls are known to have a core size that can range from 1.48 to 1.68 (balls #1 - #5), a golf ball core weight being in the range of 30 to 40 grams (balls #1 - #5), a golf ball diameter being in the range of 1.58 to 1.78 inches (balls #1 - #5) which is further known to be a standard range for golf balls diameters, a golf ball having a weight in the range of 40 to 50 grams (balls #1 - #5) and golf balls having a thread layer weight in the range of 2.5 to 25.0 grams (ball #1). Therefore it would have been obvious to one having ordinary skill in the art to manufacture the golf ball of Lutz with the above characteristics for the purpose of providing a durable golf ball with a longer flight/carry, initial velocity and roll distance that is within the limitations of the allowable tolerances (per regulation play). Furthermore, the ranges for the above characteristics would have been obvious since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

Applicant's arguments with respect to claims 1-12 and 19-22 have been considered but are moot in view of the new ground(s) of rejection. However, the

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examiner does wish to address the issue of Double Patenting with respect to U.S. Patent No. 6,270,428. Applicant argues that patent 6,270,428 is directed to a heavy filler used not in a thread layer but rather a center or a core. Upon review of patent 6,270,428 the examiner agrees that the heavy filler is in a center or a core material of a thread wound golf ball, however taking into account of applicants terminology in the currently pending application (e.g. claim 1) of "a center and a thread layer creating a core" it would seem that applicants claim terminology could be interpreted to mean that a heavy filler is found in a thread layer.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 703-305-0085. The examiner can normally be reached on Mon - Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 703-308-1745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

ds
April 16, 2003



DERRIS H. BANKS
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